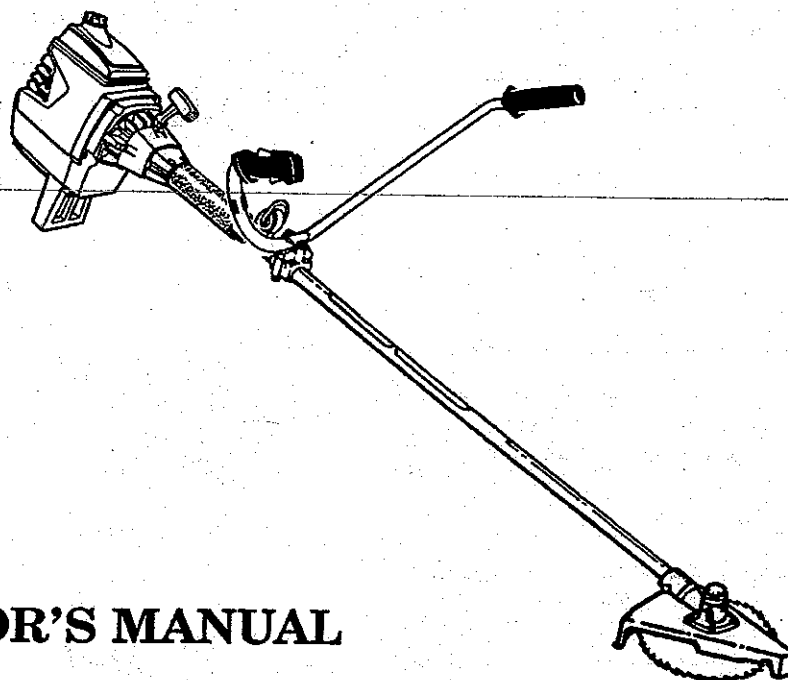


IMPORTANT MANUAL

Do Not Throw Away

Poulan

PROTM



OPERATOR'S MANUAL

MODEL:

195

GAS POWERED LINE TRIMMER

Always Wear Eye Protection

⚠ DANGER: Read the Operator's Manual and Follow All Warnings and Safety Instructions. Failure To Do So Can Result in Serious Injury.

POULAN PRO

Shreveport, Louisiana 71129

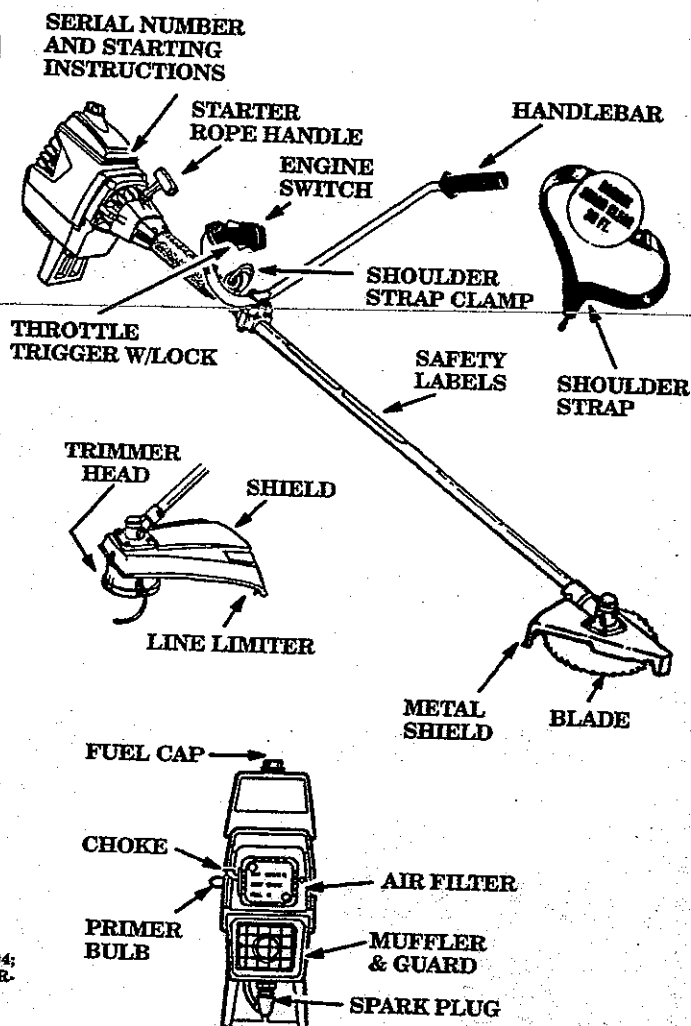
TABLE OF CONTENTS

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STARTING YOUR ENGINE	10	CUSTOMER ASSISTANCE	Back Cover

SPECIFICATIONS

ENGINE TYPE:	2-Cycle, Air Cooled
DISPLACEMENT:	30cc
ENGINE RPM:	Operating--7500 Idle--2600-3400
IGNITION:	Solid State
IGNITION TIMING:	Spark Advance - Nonadjustable
CARBURETOR:	Diaphragm All Position With Adjustable Fuel Mixture Jets
ENGINE "OFF":	Positive Switch
STARTER:	Auto Rewind
MUFFLER:	Temperature Limiting (not spark arresting)
CUTTING PATH:	Trimmer Head: 18" Blade: 8"
FUEL TANK:	500cc
SPARK PLUG:	Champion (CJ-8Y)
SPARK PLUG GAP:	.025"
MODULE AIR GAP:	.010" to .014"
LUBRICATION:	Gasoline/Oil Mixture - 40:1 (see "Fueling Your Engine")
CUTTING LINE:	.080" Diameter brand line

MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS:
4,035,912; 4,052,789; 4,112,653; 4,161,820; 4,167,812; 4, 183,138; 4,189,833; 4,211,004;
4,286,675; 4,362,074; 4,451,983; 4,841,929; 4,940,028; & D304,196. OTHER U.S. AND FOR-
EIGN PATENTS PENDING.



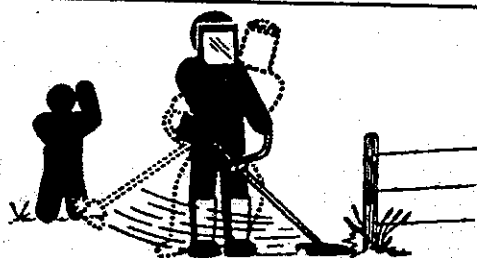
SPECIAL NOTICE

For users on U.S. Forest Land and in some states, including California(Public Resources Codes 4442 and 4443), Idaho, Maine, Minnesota, New Jersey, Oregon, and Washington: Certain internal combustion engines operated on forest, brush, and/or grass-covered land in the above areas are required to be equipped with a spark arrestor, maintained in effective working order, or the engine must be constructed, equipped, and maintained for the prevention of fire. Check with your state or local authorities for regulations pertaining to these requirements. Failure to follow these requirements is a violation of the law. **This unit is not factory-equipped with a spark arrestor;** however, a spark arrestor is available as an optional part. If a spark arrestor is required in your area, contact your Authorized Service Dealer for the correct kit.

▲ WARNINGS AND SAFETY INSTRUCTIONS

(See Additional Safety Instructions throughout this Manual)

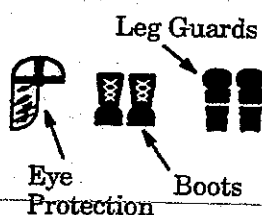
▲ DANGER – THIS POWER TOOL CAN BE DANGEROUS! This unit can cause serious injury including amputation or blindness to the operator and others. The warnings and safety instructions in this manual must be followed to provide reasonable safety and efficiency in using the unit. The operator is responsible for following the warnings and instructions in this manual and on the unit. Read the entire Operator's Manual before assembling and using the unit! Restrict the use of this unit to persons who read, understand, and follow the warnings and instructions in this manual and on the unit.



▲ DANGER

BLADE CAN THRUST VIOLENTLY AWAY FROM MATERIAL IT DOES NOT CUT.

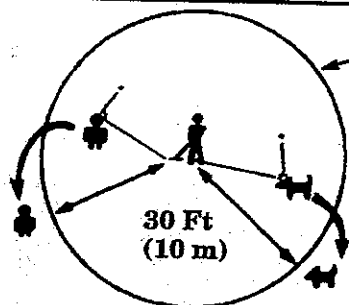
- BLADE THRUST CAN CAUSE AMPUTATION OF ARMS OR LEGS.
- KEEP PEOPLE AND ANIMALS 30 FEET (10 METERS) AWAY.



▲ WARNING

TRIMMER LINE CAN THROW OBJECTS VIOLENTLY.

- YOU CAN BE BLINDED OR INJURED.
- WEAR EYE AND LEG PROTECTION.

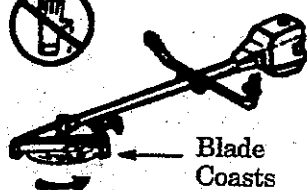


60 Foot (20 meter) Hazard Zone

▲ WARNING

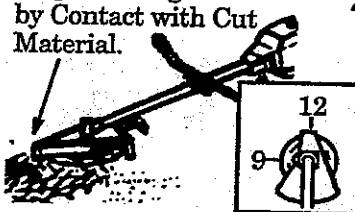
HAZARD ZONE FOR THROWN OBJECTS.

- BLADE/TRIMMER LINE CAN THROW OBJECTS VIOLENTLY.
- OTHERS CAN BE BLINDED OR INJURED.
- KEEP PEOPLE AND ANIMALS 30 FEET (10 METERS) AWAY.



Blade Coasts

Stop Coasting Blade by Contact with Cut Material.



▲ WARNING

BLADE COASTS AFTER THE THROTTLE IS RELEASED.

- THE BLADE CAN SERIOUSLY CUT YOU OR OTHERS.
- STOP THE BLADE WITH CUT MATERIAL.



Operator's Manual



Safety Labels

▲ WARNING

READ OPERATOR'S MANUAL.

- FOLLOW ALL WARNINGS AND INSTRUCTIONS.
- FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY.

SAFETY ACCESSORIES

ITEM

SAFETY FACE SHIELD

SAFETY GLASSES

SAFETY LEG GUARDS

STOCK NO.

952-701601

952-701645

952-701600

WARNINGS AND SAFETY INSTRUCTIONS....(Continued)

▲ OPERATOR SAFETY

- Always wear safety eye protection.
- Always wear heavy, long pants, long sleeves, boots, and gloves. Wearing safety leg guards is recommended. Do not go barefoot or wear sandals, jewelry, short pants, short sleeves, loose clothing, or clothing with loosely hanging ties, straps, tassels, etc.; they can be caught in moving parts. Being fully covered will help protect you from pieces of toxic plants such as poison ivy thrown by blade or trimmer head which could be more of a hazard than touching the plant itself.
- Secure hair so it is above shoulder length.
- Do not operate unit when you are tired, ill, or under the influence of alcohol, drugs, or medication.
- Wear hearing protection if you use the unit for more than 1-1/2 hours per day.
- Never start or run the engine inside a closed room or building. Breathing exhaust fumes can kill.
- Keep handles free of oil and fuel.
- Always use the handlebar and a properly adjusted shoulder strap with a blade. See "Assembly."

▲ UNIT/MAINTENANCE SAFETY

- Look for and replace damaged or loose parts before each use. Look for and repair fuel leaks before use. Keep the unit in good working condition.
- Throw away blades that are bent, warped, cracked, broken, or damaged in any other way. Replace trimmer head parts that are cracked, chipped, broken, or damaged in any other way before using the unit.
- Maintain the unit according to recommended procedures. Keep the blade sharp. Keep the cutting line at the proper length.
- Use only POULAN PRO® .080" diameter line. Never use wire, rope, string, etc.
- Install the required shield properly before using the unit. Use the metal shield for all weed blade use. Use the plastic shield for all line trimmer use.
- Use only specified blade or trimmer head; make sure it is properly installed and securely fastened.
- Never start engine with clutch shroud removed. The clutch can fly off and cause serious injury.
- Be sure blade or trimmer head stops turning when engine idles.
- Disconnect the spark plug before performing maintenance (except carburetor adjustments).
- Make carburetor adjustments with the lower end supported to prevent the blade or trimmer line from contacting any object. Hold the unit by hand; do not use the shoulder strap for support.
- Keep others away when making carburetor adjustments.
- Use only genuine POULAN PRO accessories as recommended for this unit.

If situations occur which are not covered in this manual, use care and good judgment. If you need assistance, contact your Authorized Service Dealer.

- Have all maintenance and service not explained in this manual performed by an Authorized Service Dealer.

▲ FUEL SAFETY

- Mix and pour fuel outdoors.
- Keep away from sparks or flames.
- Use a container approved for fuel.
- Do not smoke or allow smoking near fuel or the unit or while using the unit.
- Wipe up all fuel spills before starting engine.
- Move at least 10 feet (3 meters) away from fueling site before starting engine.
- Stop engine and allow it to cool before removing fuel cap.
- Empty the fuel tank before storing the unit. Use up fuel left in the carburetor by starting the engine and letting it run until it stops.
- Store unit and fuel in an area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.

▲ CUTTING SAFETY

- Inspect the area to be cut before each use. Remove objects (rocks, broken glass, nails, wire, string, etc.) which can be thrown or become entangled in the blade or trimmer head.
- Keep others including children, animals, bystanders, and helpers outside the 60-foot (20-meter) Hazard Zone. Stop the engine immediately if you are approached.
- Always keep engine on the right-hand side of your body.
- Hold the unit firmly with both hands.
- Keep firm footing and balance. Do not over-reach.
- Keep blade or trimmer head below waist level.
- Do not raise the engine above your waist.
- Keep all parts of your body away from blade, trimmer head, and muffler when engine is running.
- Cut from your right to your left.
- Use only for jobs explained in this manual.

▲ TRANSPORTING AND STORAGE

- Stop the unit before carrying.
- Keep the muffler away from your body.
- Allow engine to cool and secure unit before storing or transporting it in a vehicle.
- Empty the fuel tank before storing or transporting the unit. Use up fuel left in the carburetor by starting the engine and letting it run until it stops.
- Store unit and fuel in an area where fuel vapors cannot reach sparks or open flames from water heaters, electric motors or switches, furnaces, etc.
- Store unit so the blade or line limiter cannot accidentally cause injury. The unit can be hung by the bracket below engine or by drive shaft housing.
- Store the unit out of reach of children.

SAFETY NOTICE

Exposure to vibrations through prolonged use of gasoline powered hand tools could cause blood vessel or nerve damage in the fingers, hands, and wrists of people prone to circulation disorders or abnormal swellings. Prolonged use in cold weather has been linked to blood vessel damage in otherwise healthy people. If symptoms occur such as numbness, pain, loss of strength, change in skin color or texture, or loss of feeling in the fingers, hands or wrists, discontinue the use of this tool and seek medical attention. An anti-vibration system does not guarantee the avoidance of these problems. Users who operate power tools on a continual and regular basis must monitor closely their physical condition and the condition of this tool.

KNOW YOUR UNIT

A. INTRODUCTION

Your tool is a versatile product developed for large lawns and to make short work of a variety of lawn care tasks -- trimming, scalping, mowing, and sweeping.

Special Features Include:

- 18" Cutting Path
- TAP-N-GO® Dual Exit Trimmer Head
- Heavy Duty Precision Clutch®
- 30cc Engine
- 8" Brush Blade
- Optional 4 Point, 8" Blade

B. UNPACKING INSTRUCTIONS

1. After removing the contents from the carton, check parts against the Carton Contents list.
2. Examine the parts for damage. Do not use damaged parts.
3. Notify your POULAN PRO dealer immediately if a part is missing or damaged.

NOTE: Your unit has been shipped with a plastic shipping guard over the primer bulb (see "Specifications" for location). Remove and discard the plastic shipping guard.

NOTE: It is normal to hear the fuel filter rattle in an empty fuel tank.

C. CARTON CONTENTS

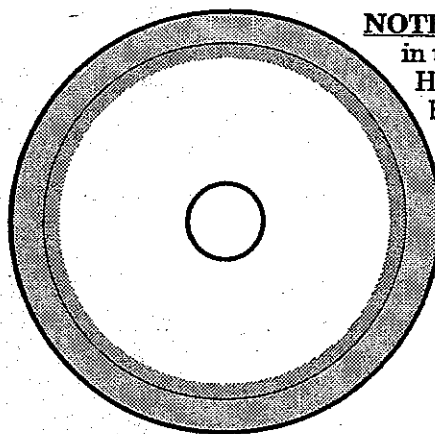
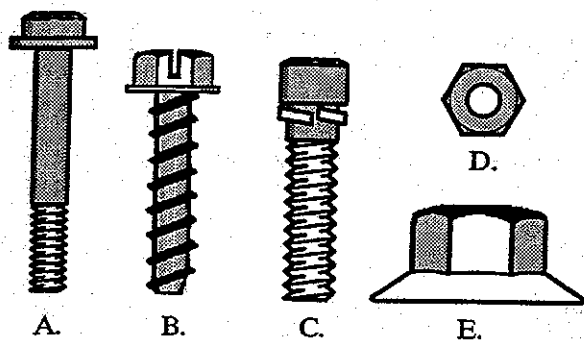
DESCRIPTION	QTY
• Engine	1
• Drive Shaft Assembly w/Safety Label	1
* • Metal Shield	1
• Plastic Shield	1
* • 8" Brush Blade	1
* • Trimmer Head	1
• Handlebar with Throttle Trigger Assembly	1
• Shoulder Strap w/Warning	1
• Operator's Manual	1
• Loose Parts Bag	1

LOOSE PARTS BAG CONTENTS:

• Hex Wrench - 5/32"	1
• Hex Wrench - 3/16"	1
A. Hex Socket Screw	2
B. Screw	4
C. Screw	6
D. Hex Nut	2
* E. Flange Hex Nut	1
F. Grass Washer	1
* G. Flat Washer	1
* H. Cupped Washer	1
I. Cover - Handlebar	1
* J. Retention Plate	1

*** WARNING**
Parts marked with * are critical and must be supplied by your POULAN PRO dealer. Failure to use the proper parts can cause the blade to fly off and seriously hurt you or others.

D. HARDWARE USAGE



NOTE: This Hardware is packaged in the Plastic Bag. Refer to the Hardware reference letters below during assembly.

**HARDWARE SHOWN
ACTUAL SIZE**

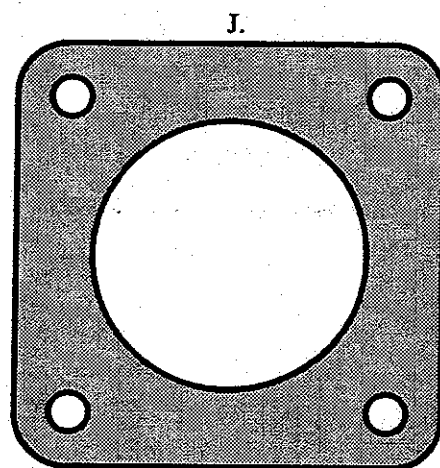
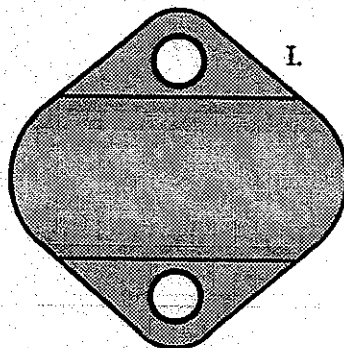
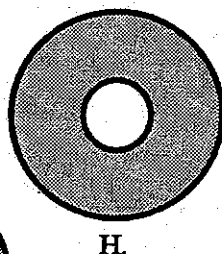
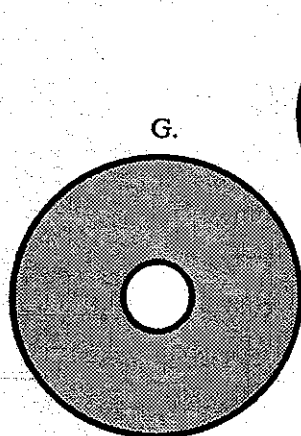


Figure 1

ASSEMBLY

(If tool is received assembled, repeat all steps in this section to be sure assembly is correct and is adjusted for the operator.)

A. PREPARATION

This Operator's Manual is designed to help you assemble the tool and to provide its safe operation. It is important that you read the entire manual to become familiar with the tool *before* you begin assembly.

1. Read your Operator's Manual

2. Tools you will need:

- Small Hex Wrench (provided)
- Large Hex Wrench (provided)
- Adjustable Wrench
- Standard Screwdriver

B. ASSEMBLY STEPS

NOTE: Hardware referred to in the following sections are shown in actual size in Figure 1.

1. TUBE

- Place screws "A." into the holes on the front shroud as shown in Figure 2.
- Position locknuts "D." in lower holes.
- Hold locknuts "D." in place; tighten screws with small hex wrench (provided) just enough to hold hardware together.
- Remove the packing cover from the straight end of the tube if so equipped. Your unit may not have a packing cover.

NOTE: Make sure the drive shaft does not fall out of the tube. Dirt on the shaft will significantly reduce the life of the unit. If the drive shaft falls out of the tube, clean, re-lubricate, and re-install. See "Drive Shaft Lubrication" in the Maintenance section.

- Align the bottom groove on the tube with the ridge on the lower wall of the engine opening.
- Turn the arbor shaft at the bottom of the tube as necessary to align the square end of the shaft with the square hole inside the front opening of the engine. Figure 2 (inset).
- Firmly push tube into the engine opening until the nose cone contacts the foam grip. Figure 2.
- Tighten screws "A." alternately with the hex wrench until secure. Figure 2.

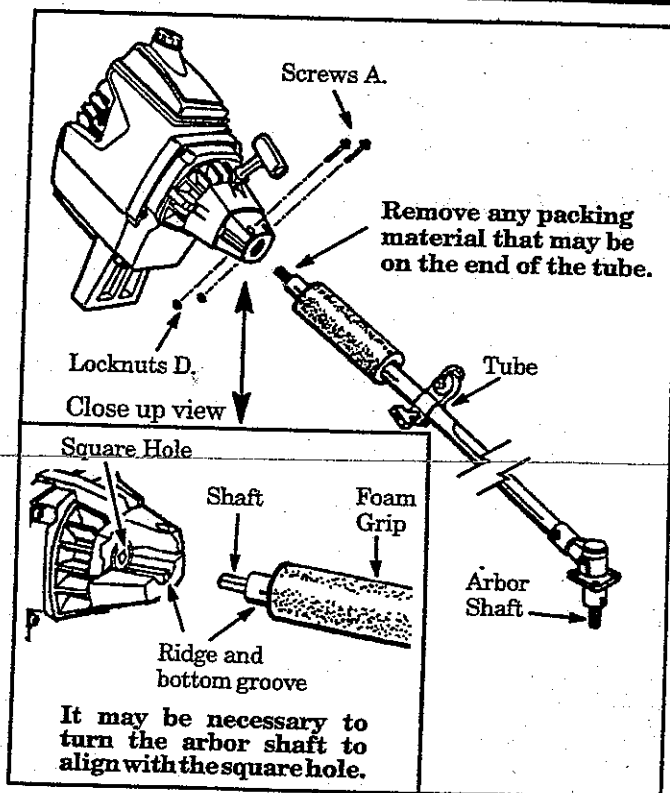


Figure 2

2. HANDLEBAR ASSEMBLY

- Locate the decal on the handlebar. Align the mounting block between the arrows on the decal; then, seat the handlebar in the mounting block.
- Position cover "I." between the arrows on the handlebar and align screw holes.
- Insert screws "C." and tighten securely.

NOTE: Refer to the illustration on the front cover for proper positioning.

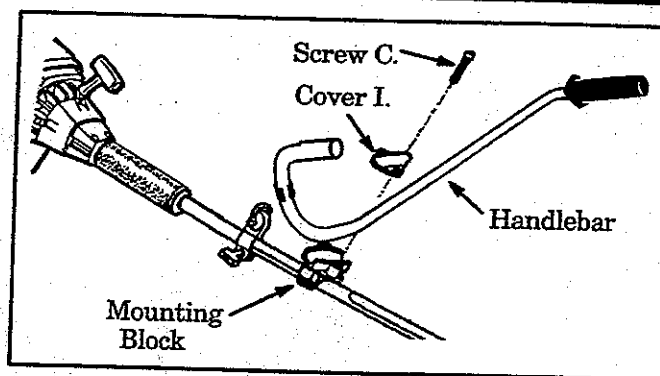


Figure 3

3. THROTTLE HANDLE ASSEMBLY

- Remove the rear screw from the trigger housing. Figure 4.
- Slide the trigger housing onto the right side of the handlebar. Align screw holes in the trigger housing with the screw hole in the handlebar.
- Reinstall the rear screw in the trigger housing. Tighten securely.

NOTE: Make sure the engine switch is located on the top side of the handle.

- Secure the loose wire assembly in the groove in the shaft pad.

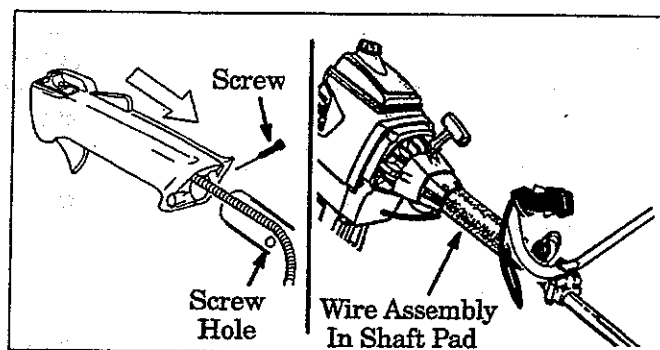


Figure 4

4. TRIMMER HEAD & PLASTIC SHIELD

▲ WARNING

The shield must be properly installed for all line trimmer usage. The shield provides partial protection from the risk of thrown objects to the operator and others and is equipped with a line limiter which cuts excess line to proper length.

▲ WARNING

Failure to install the shield in the position shown in Figure 5 can result in serious injury to the operator. The length of the shield must be aligned with the length of the tube. Direct the widest part of the shield toward the engine.

- Remove and discard the packing cover from the arbor shaft if so equipped.

CAUTION: The line limiter (on the underside of the shield) is sharp and can cut you.

- Place the shield under the gear box and insert four screws "B." through the gear box into the shield. Figure 5.
- Tighten screws "B." evenly and securely with a standard screwdriver.

NOTE: Although a screwdriver slot is provided in screws "B.", it is easier to install the screws with a wrench or socket.

- Install grass washer "H." over the arbor shaft. Make sure grass washer "H." is against and curved over the dust cup. Figure 5.
- Start threading the trimmer head onto the arbor shaft as shown in Figure 5.
- Align the hole in the dust cup with the hole in the center front of the gear box by turning the trimmer head.
- Insert the large hex wrench (provided) into the aligned holes to keep the arbor shaft from turning. Figure 5 (inset).

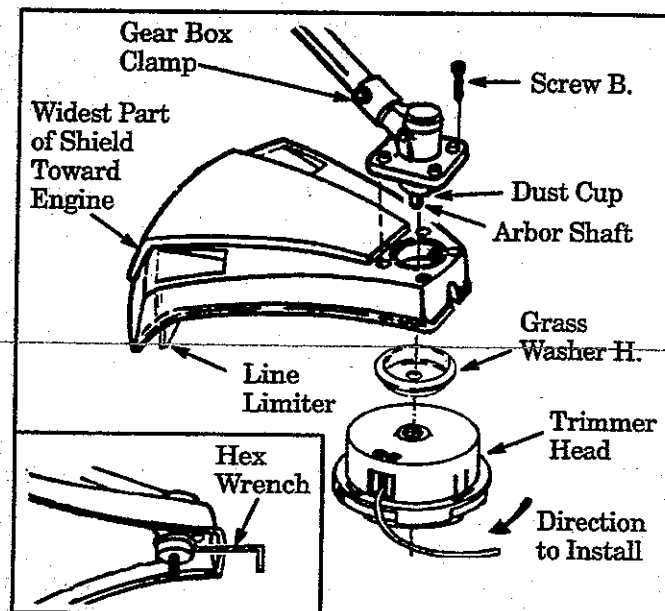


Figure 5

- Tighten the trimmer head counterclockwise against grass washer "H." and the dust cup while holding the large hex wrench. See Figure 5 (inset).
- Remove the hex wrench.

NOTE: To remove the trimmer head, insert the hex wrench into the aligned holes in the dust cup and gear box. Unthread the trimmer head. Be sure to store the grass washer, plastic shield, 4 shield screws, and hardware with the trimmer head for future use.

5. METAL SHIELD AND BLADE

▲ DANGER

The metal shield must be properly installed on the tool anytime the tool is used with the blade. The forward tip on the metal shield helps to reduce the occurrence of blade thrust which can cause serious injury such as amputation to the operator or bystanders.

▲ DANGER

Failure to install the shield in the position shown in Figures 6 and 7 can result in serious injury to the operator. The length of the shield must be aligned with the length of the tube. Direct widest part of the shield toward the engine.

NOTE: If your unit is equipped as a line trimmer, remove the trimmer head, grass washer, and plastic shield before installing the metal shield and blade. Store parts for future use.

- Remove and discard the packing cover from the arbor shaft, if so equipped.
- Remove the dust cup.
- Position the retention plate on the underside of the metal shield and align screw holes. Make sure the flat side of the plate is against the metal shield. Figure 6.
- Hold the retention plate in position and place the metal shield under the gear box. Align screw holes. Figure 6.

- e. Insert the four shield screws "C." one at a time through the gear box and shield, then thread them into retention plate "J."
- f. Tighten the screws evenly and securely with the 3/16" hex wrench (provided).
- g. Install the dust cup over the arbor shaft.
- h. Install blade over arbor shaft, making sure the hole in the center of the blade is fitted around the raised center on the dust cup. Figure 6.

NOTE: When installing blade, make sure teeth on blade are oriented as shown in Figure 6.

- i. Install the large flat washer "G.", cupped washer "H.", and nut "E." as shown in Figure 6. Be sure cupped washer "H." is installed as shown in Figure 6 (inset).
- j. Align hole in the dust cup with the hole in the side of the gear box by turning the dust cup.
- k. Insert the large hex wrench (provided) into the aligned holes. Figure 6 (inset, upper left).
- l. While holding the hex wrench in position, firmly tighten nut "E." counterclockwise with a wrench.
- m. Remove the hex wrench.
- n. Turn blade by hand. If the blade binds against shield, blade is not centered. Reinstall blade.

NOTE: To remove the blade, align holes as in step "j."; then, insert the large hex wrench. Unthread hex flange nut and remove parts. Be sure to store the blade, flat washer, cupped washer, and hex flange nut for future use.

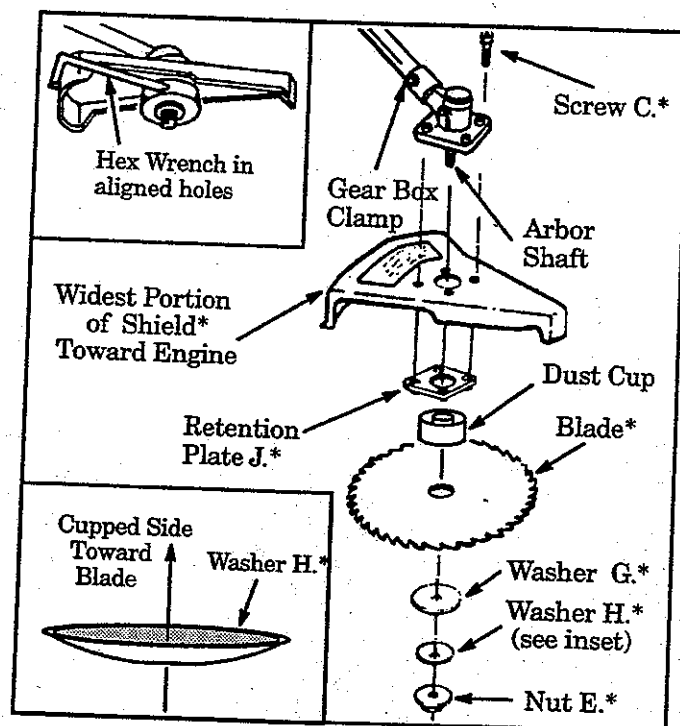


Figure 6

⚠ WARNING

Parts noted with * are critical and must be supplied by your POULAN PRO dealer. Failure to use proper parts can cause the blade to fly off and seriously hurt you or others.

6. SHOULDER STRAP

⚠ WARNING

Proper shoulder strap and handlebar adjustments before starting the engine are required for safe and efficient use.

- a. Try on shoulder strap and adjust for fit and balance before starting the engine and beginning a cutting operation.
- b. Insert your right arm and head through the shoulder strap and allow it to rest on your left shoulder. Make sure the danger sign is on your back and the hook is to the right side of your waist. Figure 7.

NOTE: A one-half twist is built in the shoulder strap to allow the strap to rest flat on the shoulder.

- c. Adjust the strap so that the hook will be about 10 inches below the waist when the hook is attached to the shoulder strap.
- d. Fasten shoulder strap hook to clamp and lift tool to the operating position. Figure 7.
- e. Check for the following:
 1. Left arm extended, hand holding handlebar grip.
 2. Right hand holding trigger handle, fingers on throttle trigger.
 3. Engine below waist level.
 4. Shoulder strap pad centered on left shoulder.
 5. Danger sign centered on your back.
 6. Full weight of tool on left shoulder.
 7. Without operator bending over, the blade or trimmer head is near and parallel to the ground and easily contacts material to be cut.

- f. Modify these initial adjustments as necessary for comfort and control but do not locate the handlebar mounting block below the point of the arrow on the safety labels. Do not locate the shoulder strap clamp in any position other than between the engine and handlebar mounting block.

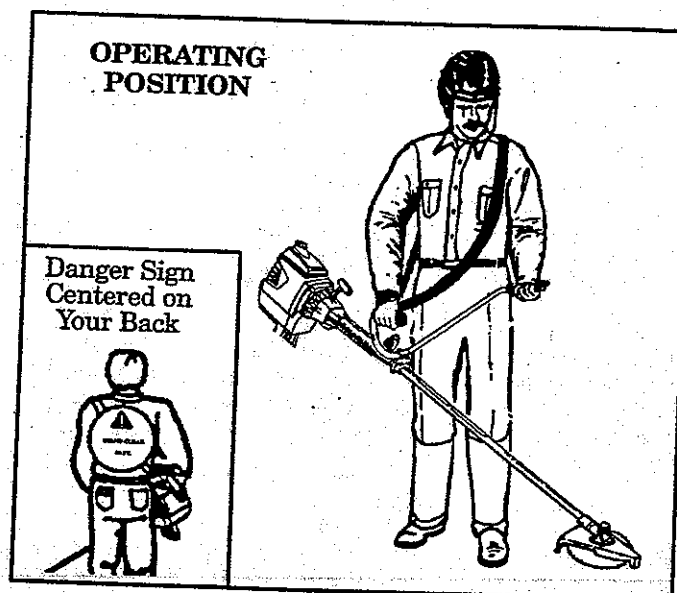


Figure 7

OPERATION -- Fueling Your Engine

BEFORE FUELING ENGINE:

▲ WARNING

Be sure to read the fuel safety section on page 4 of this manual before you begin.

If you do not understand the fuel safety section DO NOT attempt to fuel your unit; seek help from someone that does understand the fuel safety section.

GASOLINE

The two-cycle engine on this product requires a fuel mixture of regular unleaded gasoline and a high quality engine oil for lubrication of the bearings and other moving parts. The correct fuel/oil mixture is 40:1 (see Fuel Mixture Chart). Too little oil or the incorrect oil type will cause poor performance and may cause the engine to overheat and seize.

Gasoline and oil must be premixed in a clean approved fuel container. Always use fresh regular unleaded gasoline.

WARNING: Experience indicates that alcohol blended fuels called gasohol (or using ethanol or methanol) can attract moisture, which leads to oil/gas separation and formation of acids during storage. Acidic gas can damage the fuel system of an engine while in storage. To avoid engine problems, the fuel system should be emptied before storage for 30 days or longer. Drain the gas tank, then run the fuel out of the carburetor and fuel lines by starting the engine and letting it run until it stops. Use fresh fuel next season. Never use engine or carburetor cleaner products in the fuel tank or permanent damage may occur.

FUEL STABILIZER

If you do not wish to remove the gasoline from your gas tank for storage, a fuel stabilizer may be added to the gasoline in your fuel container so that it will always be present when you refuel.

2-CYCLE OIL:

Use POULAN PRO 2-cycle engine oil. If none is available, use a good quality 2-cycle, AIR-COOLED engine oil that has a recommended fuel mix of 40:1.

IMPORTANT! Do not use:

- **AUTOMOTIVE OIL**
- **BOAT OILS** (NMMA, BIA, etc.)

These oils do not have proper additives for 2-cycle, AIR-COOLED engines and can cause engine damage.

GASOLINE AND OIL MIXTURE

Mix gasoline and oil as follows:

- Consult chart for correct quantities.
- Do not mix gasoline and oil directly in the fuel tank.

FOR ONE GALLON:

- Pour 3.2 ounces of high quality, 2-cycle engine oil into an empty, approved one gallon gasoline container.
- Add one gallon of regular unleaded gasoline to the gallon container, then securely replace the cap. Shake the container momentarily.
- The mixture is now ready for use. Fuel stabilizer can be added at this time if desired; follow mixing instructions on the label.

FUEL MIXTURE CHART

40:1 Fuel:Oil Mix Ratio

<u>Gasoline</u>	<u>Oil (fl. oz.)</u>
1 gallon	3.2
1.25 gallons	4.0
2.5 gallons	8.0

FUEL SYSTEM ACCESSORIES

FUEL CAP	952-701583
POULAN PRO® 40:1 2-CYCLE ENGINE OIL	
--3.2 oz.	952-030132
--8 oz.	952-030127
--19.6 oz.	952-031139

STARTING YOUR ENGINE

(For location of controls, refer to "Specifications.")

BEFORE STARTING THE ENGINE:

- Fuel engine. Move 10 feet (3 meters) away from fueling site.

▲ WARNING

The trimmer head will turn when the engine starts.

- Rest engine and shield on ground, supporting trimmer head off ground.

NOTE: Remove and discard the plastic shipping guard on the primer bulb (if so equipped).

STARTING A COLD ENGINE, OR A WARM ENGINE AFTER RUNNING OUT OF FUEL:

- Make sure the switch is in the "On" position.
- Move the choke lever to the "Full Choke" position.
- Slowly press the primer bulb 6 times.
- Engage the throttle lock as follows
 - 1.) press the throttle lock-out
 - 2.) squeeze and hold the throttle trigger
 - 3.) press and hold the throttle lock, then
 - 4.) release the throttle trigger*Keep the throttle lock engaged until the engine runs smoothly.*
- Pull starter rope sharply 5 times.

NOTE: The engine may sound as if it is trying to start before the 5th pull. If so, go to the next step immediately.

- Move the choke lever to the "Half Choke" position.
- Pull the starter rope sharply until the engine runs, but no more than 6 pulls.

NOTE: If the engine has not started after 6 pulls (at half choke), check to make sure the switch and the choke lever are in the proper positions. Then, move the choke lever to the "Full Choke" position and press the primer bulb 6 times; pull the starter rope 2 more times. Move the choke lever to "Half Choke" and pull the starter rope until the engine runs, but no more than 6 more pulls.

NOTE: If the engine still has not started, it is probably flooded. Proceed to "Starting a Flooded Engine."

- Allow the engine to run 15 seconds, then move the choke lever to "Off Choke." Allow the unit to run for 30 more seconds at "Off Choke," then release the throttle lock by squeezing and releasing the trigger.

NOTE: If engine dies with the choke lever at the "Off Choke" position, move the choke lever to "Half Choke" and pull the rope until the engine runs.

- To stop the engine, move the switch to "Off."

▲ WARNING

Avoid any bodily contact with the muffler when starting a warm engine. A hot muffler can cause serious burns.

STARTING A WARM ENGINE THAT HAS NOT RUN OUT OF FUEL:

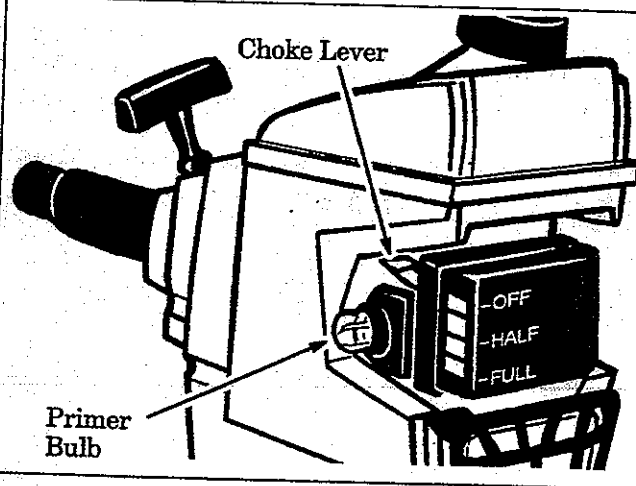
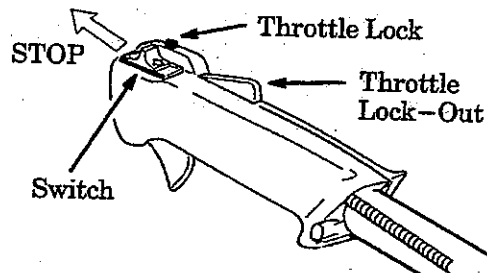
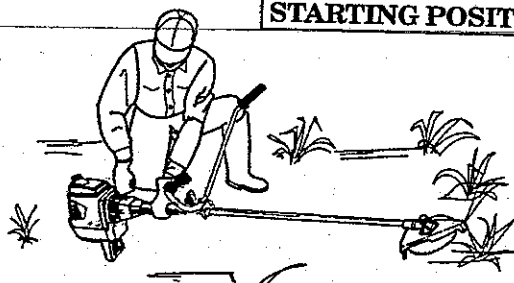
- Make sure the switch is in the "On" position.
 - Move the choke lever to the "Half Choke" position.
 - Engage the throttle lock as directed in "STARTING A COLD ENGINE, . . ." *Keep the throttle lock engaged until the engine runs smoothly.*
 - Pull starter rope sharply until engine runs, but no more than 5 pulls.
 - Allow the engine to run 15 seconds, then move the choke lever to "Off Choke." Release the throttle lock by squeezing and releasing the trigger.
- NOTE:** If engine has not started, pull starter rope 5 more pulls. If engine still does not run, it is probably flooded. Proceed to "Starting a Flooded Engine."
- To stop the engine, move switch to the "Off" position.

STARTING A FLOODED ENGINE:

Flooded engines can be started by placing the switch in the "On" position and the choke lever in the "Off Choke" position; then, pull the rope to clear the engine of excess fuel. This could require pulling the starter rope *many times* depending on how badly the unit is flooded.

If the unit still doesn't start, contact your Authorized Service Dealer for assistance.

STARTING POSITION



OPERATING INSTRUCTIONS

- When using the blade, bring the engine to full throttle before entering the material to be cut. The Blade has maximum cutting power at full throttle and is less likely to bind, stall, or cause blade thrust, which can result in serious injury to the operator or others. Refer to "Guard Against Blade Thrust".
- When using the trimmer head, do not run the engine at a higher speed than necessary. The cutting line will cut efficiently when the engine is run at less than full throttle. At lower speeds, there is less engine noise and vibration. The cutting line will last longer and will be less likely to "weld" onto the spool.
- If the blade or trimmer head does not turn when the engine is accelerated, make sure the drive shaft housing is properly seated in the engine shroud. Refer to "Assembly Steps-Tube."
- Always release throttle trigger and allow engine to return to idle speed when not cutting.
- The blade or trimmer head should not turn when the engine runs at idle speed. If the blade or trimmer head turns when the engine is at idle speed, refer to the "Trouble Shooting Chart."
- To stop engine:
 - Release the throttle trigger.
 - Move ignition switch to the "Off" position.
 - Stop the blade by allowing the "9 o'clock" position to contact cut material. Figure 8.

▲ WARNING

The blade continues to spin after the engine is turned off. The coasting blade can throw objects or seriously cut you if accidentally touched. Stop the blade by contacting the left-hand side of the coasting blade with material already cut.

▲ WARNING

Stop engine and blade before removing materials wrapped around the blade shaft to avoid injury.

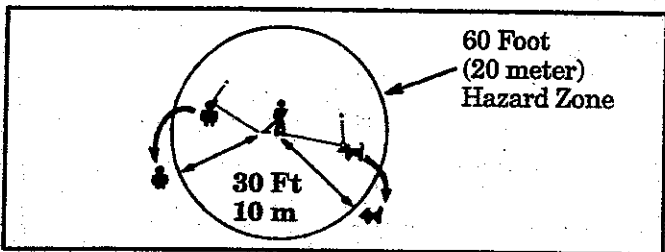
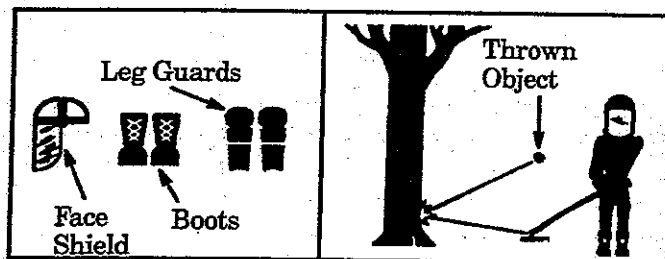
▲ WARNING

The operator or others must not try to clear away cut material with the engine running or the blade turning to avoid serious injury.



Figure 8

USING YOUR UNIT AS A LINE TRIMMER



▲ WARNING—THROWS OBJECTS

The rapidly moving line causes objects to be thrown violently. The shield will not provide complete protection to the operator or others. The operator must wear a safety face shield or goggles. Always wear heavy, long pants and boots. Keep others at least 30 feet (10 meters) away.

▲ WARNING – HAZARD ZONE

This tool will throw objects and cut. Keep others including children, animals, bystanders and helpers at least 30 feet (10 meters) away from the operator and tool. Stop the engine if you are approached.

▲ WARNING – DAMAGED TRIMMER HEAD

Trimmer head parts that are chipped, cracked or damaged in any other way can fly apart and cause serious injury. Do not use. Replace damaged parts before using the tool.

A. LINE TRIMMER SAFETY

1. OPERATOR SAFETY

- Always wear eye protection when operating, servicing, or performing maintenance on your unit. See "Safety Accessories."

- Do not operate this tool when you are tired, ill or under the influence of alcohol, drugs, or medication.

- c. Always wear heavy, long pants, long sleeves, boots, and gloves. Do not go barefoot or wear sandals, short pants, short sleeves, jewelry, loose clothing, or clothing with loosely hanging straps, ties, tassels, etc.; they can be caught in moving parts. Secure hair so it is above shoulder length. Being fully covered will help protect you from pieces of toxic plants such as poison ivy thrown by the blade, which could be more of a hazard than touching the plant itself.
- d. Do not swing the tool with such force that you are in danger of losing your balance.
- e. Never start or run the engine inside a closed room or building. Breathing exhaust fumes can kill.
- f. Keep handles free of oil and fuel.

2. TOOL SAFETY

- a. Inspect the entire tool before each use. Replace damaged parts. Check for fuel leaks and make sure all fasteners are in place and securely fastened.
- b. Use only .080" diameter line. Never use wire or rope, string, etc.
- c. Be sure the shield is properly attached.
- d. Make sure trimmer head is properly installed and securely fastened. Refer to "Assembly."

- e. Be sure trimmer head stops turning when engine idles. See "Carburetor Adjustments."
- f. Make carburetor adjustments with the drive shaft housing supported to prevent the trimmer line from contacting any object.
- g. Keep others away when making carburetor adjustments.
- h. Use only POULAN PRO accessories or attachments as recommended.

3. CUTTING SAFETY

- a. Inspect the area to be cut before each use. Remove objects (rocks, broken glass, nails, wire, string, etc.) which can be thrown or become entangled in the trimmer head.
- b. Always keep the engine on the right side of your body.
- c. Hold the tool firmly with both hands.
- d. Keep firm footing and balance. Do not over-reach.
- e. Keep the trimmer head below waist level.
- f. Do not raise the engine above your waist.
- g. Keep all parts of your body away from the trimmer line and muffler when engine is running.
- h. Use only for jobs explained in this manual.

B. TRIMMER LINE ADVANCE

- The trimmer line will advance approximately 2 inches each time the bottom of the trimmer head is tapped on the ground with the engine running at full throttle.
- The most efficient line length is the maximum length allowed by the line limiter.
- Always keep the shield in place when the tool is being operated. Figure 9.
- To Advance Line:
 1. Operate the engine at full throttle.
 2. Hold the trimmer head parallel to and above the grassy area.
 3. Tap bottom of trimmer head lightly on ground one time. See Figure 9. Approximately 2 inches of line will be advanced with each tap.

NOTE: Always tap trimmer head on a grassy area. Tapping on surfaces such as concrete or asphalt can cause excessive wear to the trimmer head.

NOTE: If the line is worn down to two inches or less, more than one tap will be required to obtain the most efficient line length.

▲ WARNING

Use only .080" diameter line. Other sizes of line will not advance properly. Do not use other materials such as wire, string, rope, etc. Wire can break off during cutting and become a dangerous missile that can possibly cause serious injury.

▲ WARNING

Use minimum speed and do not crowd the line when cutting around hard objects (rock, gravel, fence posts, etc), which can damage the trimmer head, become entangled in the line, or be thrown causing a serious hazard.

To Advance Line,
Tap Bottom Of
Trimmer Head On
Ground One Time.

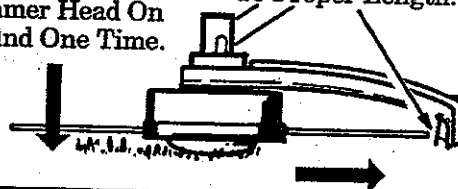


Figure 9

C. CUTTING METHODS

- The tip of the line does the cutting. You will achieve the best performance and minimum line wear by not crowding line into cutting area. The right and wrong ways are shown in Figure 10.
- For trimming or scalping, use less than full throttle to increase line life, especially:
 - during light duty cutting.
 - near objects around which the line can wrap such as small posts, trees or fence wire.

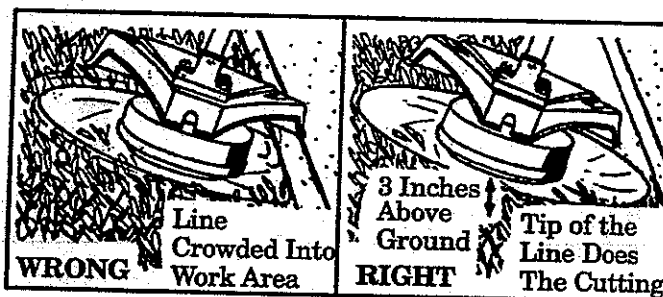


Figure 10

- The line will easily remove grass and weeds from around walls, fences, trees and flower beds, **but it also can cut the tender bark of trees or shrubs and scar fences.** To help avoid damage especially to delicate vegetation or trees with tender bark, shorten line to 4–5 inches and use at less than full throttle.
- For mowing or sweeping, use full throttle for a good clean job.

▲ WARNING

Use minimum speed and do not crowd the line when cutting around hard objects (rock, gravel, fence posts, etc), which can damage the trimmer head, become entangled in the line, or be thrown causing a serious hazard.

▲ WARNING

Always wear eye protection. Never lean over the trimmer head. Rocks or debris can ricochet or be thrown into eyes and face and cause blindness or other serious injury.

1. **TRIMMING** – Figure 11 . Hold bottom of the trimmer head about 3 inches above ground and at an angle. Allow only the tip of the line to make contact. Do not force trimmer line into work area.
2. **SCALPING** – Figure 12 . The scalping technique removes unwanted vegetation. Hold the bottom of the trimmer head about 3 inches above the ground and at an angle. Allow the tip of the line to strike ground around trees, posts, monuments, etc. *This technique increases line wear.*
3. **MOWING** – Figure 13 . Your trimmer is ideal for mowing in places conventional lawn mowers cannot reach. In the mowing position, keep the line parallel to the ground. Avoid pressing the head into the ground as this can scalp the ground and damage the tool.
4. **SWEEPING** – Figure 14 . The fanning action of the rotating line can be used for a quick and easy clean up. Keep the line parallel to and above surfaces being swept and move tool from side to side.

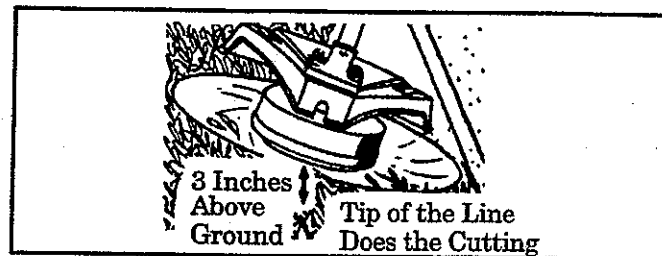


Figure 11

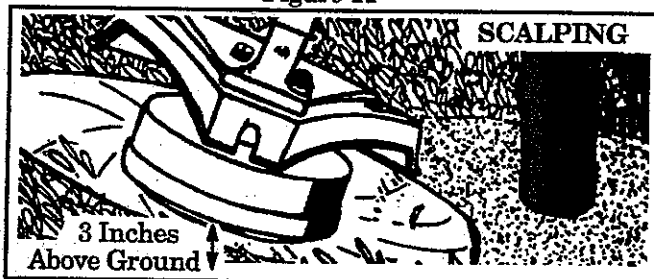


Figure 12

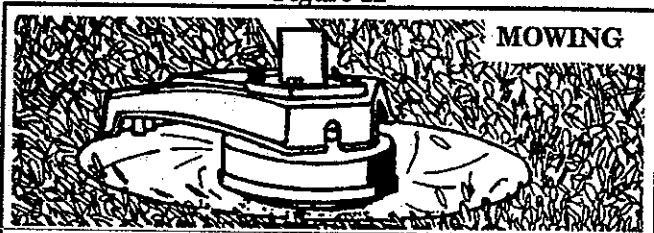


Figure 13

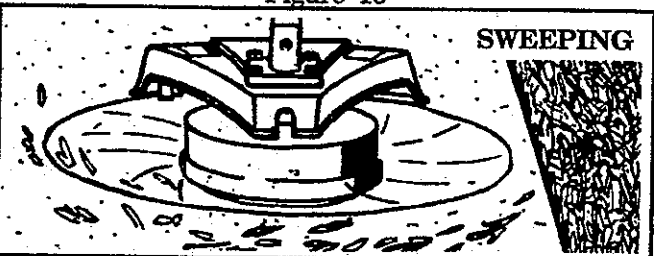


Figure 14

D.LINE REPLACEMENT

- For proper line feed:
 - Use only genuine **POULAN PRO** pre-wound spools and .080" diameter line. Use of other types of spools or lines can result in excessive breakage, line welding and improper line feed.
 - Pre-wound spools offer the most convenient method for replacing line as well as optimum performance.
 - Always clean dirt and debris from spool and hub when performing any type maintenance.
1. **Installing Spool w/Line**
 - a. Press lock tab and turn lock ring. Figure 15 .
 - b. Remove lock ring and spool. Figure 16 .
 - c. Clean dirt and debris from all parts.
 - d. Inspect all trimmer head parts for damage. Replace damaged parts.

▲ WARNING

Trimmer head parts that are chipped, cracked, broken, or damaged in any other way can fly apart and cause serious injury. Do not use. Replace damaged parts before using the tool.

- e. Install new spool by routing one of the two lines through each line exit hole. Figure 17 . Place spool in hub. Make sure trimmer line is not caught between rim of spool and hub.



Figure 15

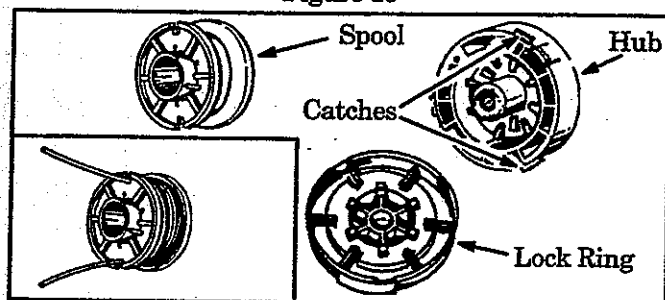


Figure 16

- f. Align the lock ring over the three catches on the hub. Push the lock ring down on the hub and turn as shown in Figure 15 .

⚠ WARNING
All three catches must be fastened and the lock tab latched onto the Lock Ring. If installed incorrectly, the Lock Ring can fly off and become a dangerous missile.

- g. Check to make sure all three catches (Figure 16) and the lock tab (Figure 17) are properly fastened. Figure 18. Then test the Lock ring by trying to turn it counterclockwise.
- h. Pull on line to change the spool from the locked position to the operating position. Figure 19.
- i. Obtain correct line length (4") by pressing tap button and pulling line again. Figure 19.

2. Installing Line on Spool

a. To replace the Line on existing Spool:

- 1.) Follow "Installing Spool w/Line," steps "a.-d." and remove any line remaining on the spool.
- 2.) Use two 20 foot lengths of POULAN PRO .080" line.
- 3.) Insert 1/16" to 1/8" of the end of each line through two of the holes in the inner rim of the spool. Figure 20. Allow no more than 1/8" line to extend beyond the rim to avoid interference with tapping action.
- 4.) With your finger between the lines, wrap the lines onto the spool firmly and evenly in a clockwise direction as shown by the arrow on the spool. Figure 20.

NOTE: The line must be wrapped firmly and evenly for proper line feed.

- 5.) Follow "Installing Spool w/Line," steps "e.-i."

- b. If line breaks off or backs up in the trimmer head, follow "Installing Spool w/Line," steps "a.-d." Pull slack in line until line is tightly wound onto spool, leaving 4-6 inches of extended line. Continue with steps "e.-i."

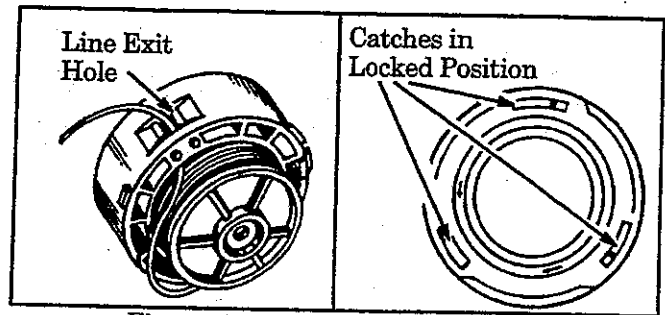


Figure 17

Figure 18

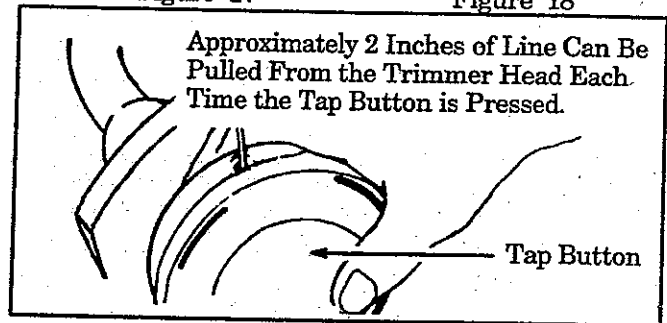


Figure 19

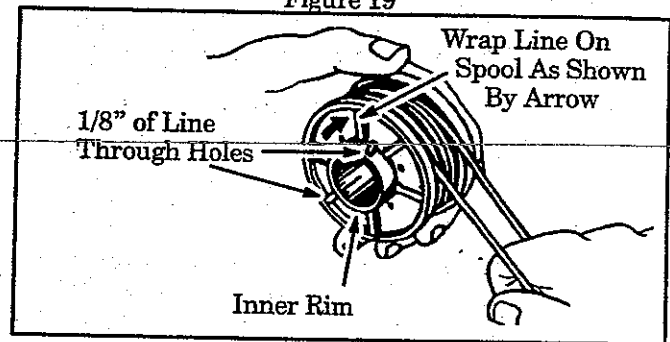


Figure 20

3. Trouble Shooting the Trimmer Head and Line

NOTE: For best results, POULAN/WEED EATER recommends the use of POULAN PRO brand line.

- **Does not advance, or breaks while cutting:**
 - Improperly wound onto spool.
 - Line size incorrect.
 - Too little line outside head.
 - Improperly routed in head.
- **Welds onto spool:**
 - Line size incorrect.
 - Incorrect spool.
 - Crowding line against material being cut.
 - Cutting at higher speeds than necessary.
 - Inferior line.
- **Pulls back into head:**
 - Too little line outside of head.
- **Releases continuously:**
 - Improperly routed in head.
 - Line size incorrect.
- **Usage is excessive:**
 - Improperly routed in head.
 - Line size incorrect.
 - Cutting at high speeds around hard objects.
 - Crowding line against material being cut.
 - Inferior line.

MAINTENANCE ACCESSORIES

TAP-N-GO DUAL EXIT HEAD ... 952-711517

SPOOL W/LINE 952-711518

NYLON CUTTING LINE (.080 dia.)

80 Ft. 952-711510

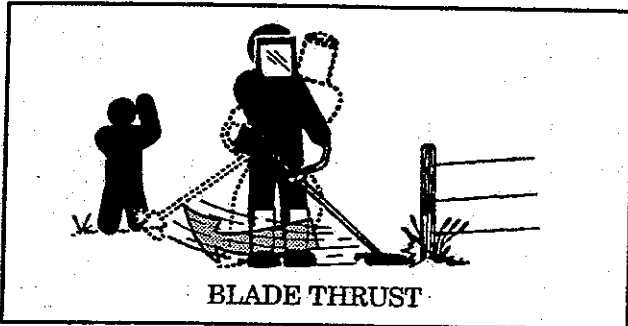
200 Ft. 952-711511

400 Ft. 952-711512

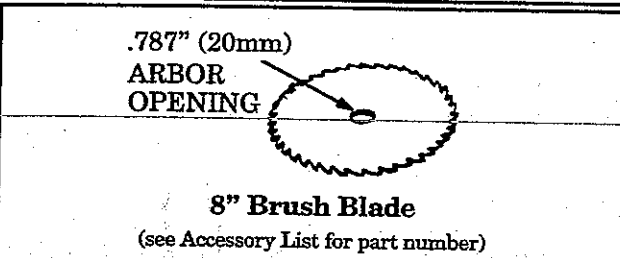
USING YOUR UNIT AS A BRUSHCUTTER

The 8 inch Brush Blade is designed to cut grass, weeds, and woody brush and small trees up to 2 inches in diameter.

▲ DANGER – THIS POWER TOOL CAN BE DANGEROUS! Do not attach a blade to this unit without the proper installation of all parts. The Handlebar in the kit must be used as a barrier between the operator and the blade. Failure to use the handlebar can result in serious injury to the operator. This unit can cause serious injury including amputation or blindness to the operator and others. The warnings and safety instructions in this manual must be followed to provide reasonable safety and efficiency in using this unit. The operator is responsible for following the warnings and instructions in this manual and on the unit. **Read the entire Operator's Manual before using this unit!** Restrict the use of this power tool to persons who read, understand, and follow the warnings and instructions in this manual and on the unit.

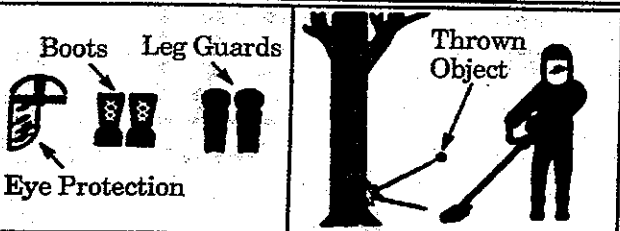


▲ DANGER – BLADE THRUST When the spinning blade contacts anything it does not cut, a dangerous reaction can occur causing the entire unit and operator to be thrust violently in any direction. This reaction is called Blade Thrust. As a result, the operator can lose control of the unit. **Use handlebar, shoulder strap, and keep shield in place. Make sure others are at least 30 feet (10 meters) away. Keep blade sharp. Cut at full throttle and from your right to left. Keep hands, feet and unit in proper position; refer to "Guard Against Blade Thrust."**



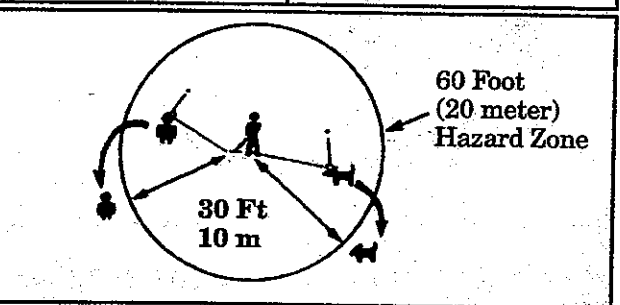
▲ DANGER – PROPER BLADE

Use only the 8 inch Brush Blade and proper hardware as shown. The use of any other parts can result in serious injury. Do not use any accessory or attachment other than those recommended by the manufacturer for use with this unit. Blades that are bent, warped, cracked, broken, or damaged can fly apart and cause serious injury. Do not use; Throw away.



▲ WARNING – THROWS OBJECTS

The rapidly moving blade causes objects to be thrown violently. The shield will not provide complete protection to the operator or others. The operator must wear a safety face shield or goggles. Always wear safety leg guards and boots. Keep others at least 30 feet (10 meters) away.



▲ WARNING – HAZARD ZONE

This unit will throw objects and cut. Keep others including children, animals, bystanders, and helpers at least 30 feet (10 meters) away from the operator and unit. Stop the engine and blade immediately if you are approached.

NOTE: In areas where other people and animals are present, such as near sidewalks, streets, houses, etc., it is strongly recommended that the operator use the buddy system; that is, have another person serve as a "look out," keeping himself and others at least 30 feet (10 meters) away from the operator.



▲ WARNING – COASTING BLADE

The blade continues to spin after the engine is stopped or the throttle is released. The coasting blade can thrust, throw objects, or seriously cut you if accidentally touched. Stop the blade by leaving it in contact with material already cut. Use the "9 o'clock" position as the point of contact.

A. BLADE SAFETY

1. OPERATOR SAFETY

- Always wear eye protection when operating, servicing, or performing maintenance on your unit. See "Safety Accessories."
- Always wear heavy, long pants, long sleeves, boots, and gloves. Do not go barefoot or wear sandals, jewelry, short pants, short sleeves, loose clothing, or clothing with loosely hanging straps, ties, tassels, etc.; they can be caught in moving parts. Secure hair so it is above shoulder length. Being fully covered will help protect you from pieces of toxic plants such as poison ivy thrown by the blade, which could be more of a hazard than touching the plant itself.
- Do not operate this unit when you are tired, ill, or under the influence of alcohol, drugs, or medication.
- Always use the handlebar and a properly adjusted shoulder strap. See "Assembly."
- Do not swing the unit with such force that you are in danger of losing your balance.
- Never start or run the engine inside a closed room or building. Breathing exhaust fumes can kill.
- Keep handles free of oil and fuel.

2. UNIT SAFETY

- Inspect the entire unit before each use. Replace damaged parts. Check for fuel leaks and make sure all handles, guards, and fasteners are in place and securely fastened.

- Be sure the metal shield is properly attached. The metal shield *must* be installed for all blade usage.
- Make sure the blade is properly installed and securely fastened. Refer to "Assembly."
- Be sure the blade stops turning when the engine idles. See "Trouble Shooting Chart."
- Make carburetor adjustments with the drive shaft housing supported to prevent the blade from contacting any object. Hold unit by hand; do not use the shoulder strap for support.
- Keep others away when making carburetor adjustments.
- Have all maintenance and service not explained in this manual performed by an Authorized Service Dealer.

3. CUTTING SAFETY

- Inspect the area to be cut before each use. Remove objects (rocks, broken glass, nails, wire, string, etc.) which can be thrown or become entangled in the blade.
- Always keep the engine on the right side of your body. Hold the unit firmly with both hands.
- Keep firm footing and balance. Do not over-reach.
- Keep blade below waist level.
- Do not raise the engine above your waist. The blade can come dangerously close to your body.
- Cut at full throttle.
- Cut from your right to your left.
- Use only for jobs explained in this manual. Do not use the blade as an edger. The shield does not provide adequate protection.

B. GUARD AGAINST BLADE THRUST

- Blade Thrust* is a reaction that only occurs when using a bladed unit. This reaction can cause serious injury such as amputation. Carefully study this section. It is important that you understand what causes *blade thrust*, how you can reduce the chance of its occurring, and how you can remain in control of the unit if *blade thrust* occurs.

- The forward tip on the shield helps to reduce the occurrence of *blade thrust* but cannot prevent the occurrence. The operator must follow all warnings and safety instructions in this section to lessen the chance of *blade thrust* occurring and to maintain control of unit if the reaction does occur.

- 1. WHAT CAUSES BLADE THRUST** *Blade Thrust* can occur when the spinning blade contacts an object that it does not cut. This contact causes the blade to stop for an instant and then suddenly move or "thrust" away from the object that was hit. The "thrusting" reaction can be violent enough to cause the operator to be propelled in any direction and lose control of the unit. The uncontrolled unit can cause serious injury if the blade contacts the operator or others. Figure 21.

- 2. WHEN BLADE THRUST OCCURS.** *Blade thrust* can occur without warning if the blade snags, stalls, or binds. This is more likely to occur in areas where it is difficult to see the material being cut. By using the unit properly, the occurrence of *blade thrust* will be reduced and the operator will be less likely to lose control.

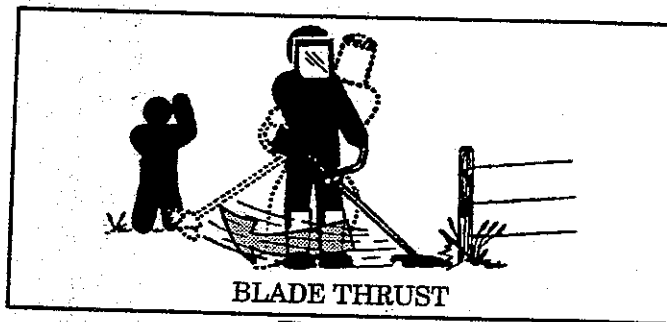


Figure 21

3. REDUCE THE CHANCE OF BLADE THRUST

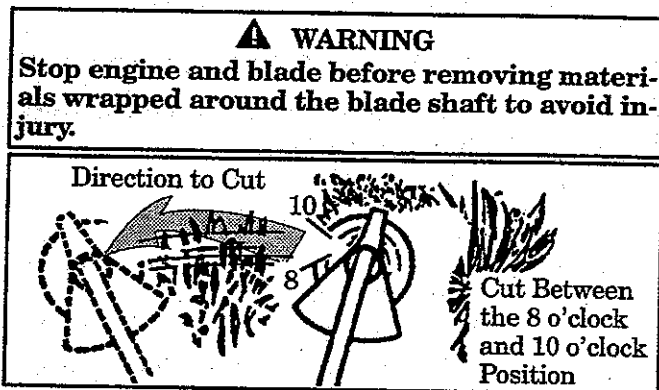
- Cut only grass, weeds, and woody brush up to 2 inches in diameter with the brush blade. Do not let the blade contact material it cannot cut such as stumps, rocks, fences, metal, etc., or clusters of hard, woody brush having a diameter greater than 2 inches.
- Keep the blade sharp. A dull blade is more likely to snag and thrust.
- Cut only at full throttle. The blade has maximum cutting power at full throttle and is less likely to bind or stall.
- "Feed" the blade deliberately and not too rapidly. The blade can thrust away if it is fed too rapidly.
- Cut only from your right to your left. Swinging the unit in the same direction as the blade spins increases the cutting action.

4. MAINTAIN CONTROL

- a. Use the shoulder strap and keep a firm grip on the unit with both hands. A properly adjusted shoulder strap will support the weight of the unit, freeing your arms and hands to control and guide the cutting motion.
- b. Keep feet comfortably spread apart and braced for the possibility of a sudden, rapid thrust of the unit. Do not overreach. Keep firm footing and balance.
- c. Keep the blade below waist level. It will be easier to maintain control of the unit.
- d. Do not raise the engine above your waist as the blade can come dangerously close to your body.
- e. Do not swing the unit with such force that you are in danger of losing your balance.

C. CUTTING METHODS

1. Establish a rhythmic cutting procedure.
 - a. Plant feet firmly, comfortably apart.
 - b. Cut while swinging the upper part of your body from right to left.
 - c. Move forward to the next area to be cut after the return swing and plant feet once more.
2. Use the 8 o'clock to 10 o'clock position for cutting. Figure 22.
3. Stop the engine and blade, then unclip the shoulder strap from unit before clearing cut material.
4. To reduce the chance of material wrapping around the blade, follow these steps:
 - a. Cut at full throttle.
 - b. Swing the unit into material to be cut from your right to your left.
 - c. Avoid the material just cut as you make the return swing.



⚠ WARNING
The operator or others must not try to clear away cut material with the engine running or the blade turning to avoid serious injury.

BLADE ACCESSORIES

8" BRUSH BLADE	952-711508
OPTIONAL 4 POINT, 8" BLADE	952-711506

NOTES

GENERAL MAINTENANCE

A. MAINTENANCE SAFETY

1. Maintain the unit according to recommended procedures. Keep cutting line at the proper length.
2. Never start engine with clutch shroud removed. The clutch can fly apart and cause serious injury.
3. Disconnect the spark plug before performing maintenance except for carburetor adjustments.
4. Make carburetor adjustments with the lower end supported to prevent the trimmer line from contacting any object.
5. Keep others away when making carburetor adjustments.
6. Be sure blade or trimmer head stops turning when engine idles. See "Carburetor Adjustments."
7. Replace blade or trimmer head parts that are cracked, chipped, or damaged in any other way before using the unit.
8. Use only POULAN PRO .080" diameter line. Never use wire, rope, string, etc.
9. Use only genuine POULAN PRO replacement parts as recommended.
10. Inspect the entire unit. Replace damaged parts. Check for fuel leaks and make sure all fasteners are in place and securely fastened.

B. FLEXIBLE DRIVE SHAFT LUBRICATION

- Lubricate the drive shaft:
 - After each ten (10) hours of operation.
 - Before operating if the unit has been stored for 90 days or longer.
- To order flex shaft lube, see the Accessory List for the proper part number.

⚠ WARNING

If the engine is hot, avoid touching the muffler. A hot muffler can cause serious burns.

CAUTION: Lay the drive shaft on a clean surface. Avoid laying shaft on the floor, ground or on any other surface that may have dirt or debris. Even after wiping the shaft, grease residue can pick up particles that can cause damage or premature failure.

CAUTION: Take care to avoid injury to your hands and fingers with broken wires when checking for damage or wiping the drive shaft. A cloth will not prevent broken wires from puncturing or tearing your skin.

1. Remove the gear box clamp screw and the locating screw from the gear box. Figure 23.
2. Remove gear box from the tube. Figure 23.
3. Remove the drive shaft from the tube. Figure 23 (inset).

4. Check drive shaft for broken wires, twists, or kinks, and replace if damage is found.
5. Using a clean cloth, wipe the surface of the drive shaft thoroughly to remove any old grease.
6. Apply a uniform coat of lube to the entire surface of the drive shaft.
7. Inject the remaining contents of the container into the top of the tube.
8. Reinstall the drive shaft in the tube. Figure 23 (inset).
9. Reassemble the gear box to the tube. Tighten screws securely.

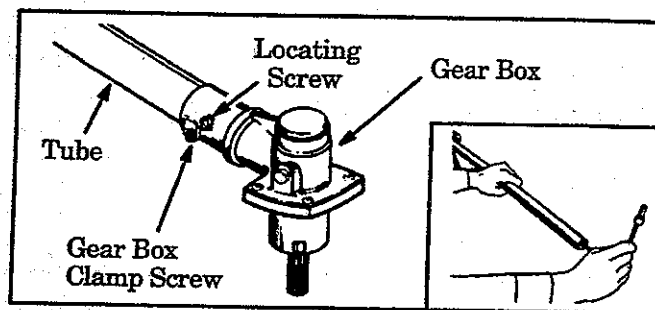


Figure 23

C. AIR FILTER

NOTE: A dirty air filter decreases the life and performance of the engine and increases fuel consumption.

1. Clean the Air Filter:

- Always after 5 tanks of fuel or 5 hours of operation, whichever is less.
- More frequently, in dusty conditions.
 - a. Loosen the two screws on the air filter cover enough to remove the cover from the engine. Figure 24.
 - b. Remove air filter from cover. Figure 24.
 - c. Wash filter in soap and water.
 - d. Squeeze filter dry and replace in cover.

CAUTION: Do not clean the air filter in gasoline or other flammable solvent to avoid creating a fire hazard.

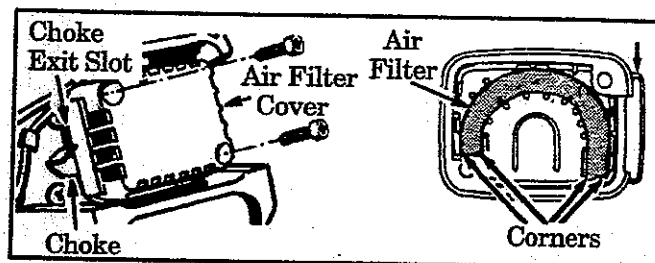


Figure 24

- e. Reinstall the air filter cover, making sure the choke exit slot (Figure 24) is placed over the choke lever.

CAUTION: Make sure air filter is fitted into corners of the cover to keep dust from entering engine and causing engine damage.

NOTE: If replacing the air filter, see the Accessory List for the proper part number.

D. CARBURETOR ADJUSTMENTS

NOTE: This is a complicated task. Read all warnings and instructions thoroughly before starting adjustments. If you do not think that you completely understand all warnings and instructions, let your Authorized Service Dealer perform these adjustments.

▲ DANGER

Make carburetor adjustments with the lower end supported to prevent blade or trimmer line from contacting any object. Hold unit with your hand; do not use optional shoulder strap for support.

▲ WARNING

Keep others away when making carburetor adjustments.

▲ WARNING

Serious injury to the operator and others can occur if the carburetor is not properly adjusted.

- Poor engine performance can be a result of other causes such as dirty air filter, carbon build-up on muffler outlets, etc. See "Trouble Shooting Chart" before proceeding with carburetor adjustments.
- The carburetor has been carefully adjusted at the factory. However, the operator must be sure that adjustments are made when any of the conditions occur as mentioned on the next page in "Trouble Shooting Suggestions".
- Very small adjustments can affect engine performance. It is important to turn the screw a very small amount per adjustment and test performance before making further adjustments. Each adjustment should be no more than the width of the slot in the adjusting screw.
- This is a complicated task and it is important to follow instructions in sequence as indicated.

1. TROUBLE SHOOTING SUGGESTIONS

- Engine will not continue to run at idle position. See "Idle Speed Adjustment" and "Low Speed Mixture Adjustment."
- Blade or trimmer head continues to spin when the engine idles. See "Idle Speed Adjustment" and "Deceleration Check."
- Engine dies or hesitates when it should accelerate. See "Acceleration Check."
- Loss of cutting power which cannot be corrected by cleaning the air filter. See "High Speed Mixture Adjustment."
- Engine does not return to idle from full throttle within 2 seconds. See "Deceleration Check."
- Engine will not run. See "Trouble Shooting Chart." Then, if the carburetor requires adjustment, begin with "Basic Carburetor Settings."

▲ WARNING

The blade or trimmer line will be spinning during most of this procedure. Wear protective equipment and observe all safety instructions.

2. BASIC CARBURETOR SETTINGS

NOTE: In most cases, your engine can be made to run properly with minor carburetor adjustments. Refer to "Trouble Shooting Suggestions" in the left column for the condition you are experiencing and follow the instructions. The basic carburetor settings are provided below.

- a. Turn the low speed mixture screw and the high speed mixture screw (Figure 25) clockwise until they stop. *Do not turn the screws until they are tight as damage to the needle seats can occur.*
- b. Turn the low speed mixture and high speed mixture screws between three-quarters and one full turn counterclockwise.

3. ADJUSTING PROCEDURE

a. PREPARATION

1. Use a fresh fuel mix. See "Fueling Your Engine."
2. Make sure the line extends to the length allowed by the line limiter to provide correct load on engine.
3. Start the engine. Cut grass for 3 minutes to warm engine. *The engine must be at operating temperature before carburetor adjustments can be performed correctly.*

b. IDLE SPEED ADJUSTMENT

1. Allow engine to idle.
2. Adjust idle speed screw (Figure 25) until engine continues to run without stalling and without blade or trimmer head moving.
 - Turn screw clockwise to increase engine speed if the engine stalls or dies.
 - Turn screw counterclockwise to slow engine down and/or to keep blade or trimmer head from turning.
3. Follow instructions in "Acceleration Check" and "Deceleration Check."
4. No further adjustments are necessary if the blade or trimmer head does not turn at idle speed and if performance is satisfactory.

▲ WARNING

Recheck idle speed after each adjustment. The blade or trimmer head must not turn at idle speed to avoid serious injury to the operator and others.

c. ACCELERATION CHECK

1. Allow engine to idle.
2. Squeeze trigger fully
 - a. If performance is satisfactory, proceed to "d. Deceleration Check."
 - b. If the engine does not accelerate smoothly, turn the low speed mixture screw (Figure 25) counterclockwise a small amount (no more than the width of the slot in the adjusting screw).
3. Repeat step "2.)" until smooth acceleration is obtained.

NOTE: It may be necessary to repeat "Idle Speed Adjustment" through "Acceleration Check," to obtain correct adjustments.

4. Follow instructions in "Deceleration Check."

d. DECELERATION CHECK

1. Allow engine to idle, then squeeze throttle trigger fully.
2. Allow engine to run at full speed for about 1 second.
3. Release the throttle trigger to the idle position and listen to the deceleration of the engine. It must return to idle smoothly and within 1 to 2 seconds.
 - a. If performance is satisfactory, proceed to step "4."
 - b. If the engine slowly or erratically returns to idle or idles erratically, repeat "Idle Speed Adjustment" or continue through Low Speed Mixture and High Speed Mixture Adjustments to obtain proper deceleration.
4. Recheck idle speed.

e. LOW SPEED MIXTURE ADJUSTMENT

1. Allow engine to idle.
2. Turn the low speed mixture screw (Figure 25) slowly clockwise until the speed starts to drop. Note this position.
3. Turn the low speed mixture screw counterclockwise until the speed increases and then starts to drop again. Note this position.
4. Set the low speed mixture screw at the midpoint between the two positions.
5. Follow instructions in "Acceleration Check" and "Deceleration Check."

f. HIGH SPEED MIXTURE ADJUSTMENT

CAUTION: Do not operate engine at full throttle for prolonged periods while making high speed adjustments as damage to the engine can occur.

1. Support the lower end so the trimmer line is off the ground and will not make contact with any object.
2. Allow engine to idle, then squeeze throttle trigger fully.

NOTE: Perform steps "3." through "5." at full throttle.

3. Turn high speed mixture screw (Figure 25) very slowly clockwise until engine speed is reduced.
4. Turn high speed mixture screw very slowly counterclockwise. Stop when the engine begins to run roughly.
5. Turn screw slowly the minimum amount clockwise until the engine runs smoothly.
6. Follow instructions in "Acceleration Check" and "Deceleration Check".

CAUTION: If the engine does not operate according to these instructions after repeating the adjusting steps, do not use the unit. Take it to your Authorized Service Dealer.

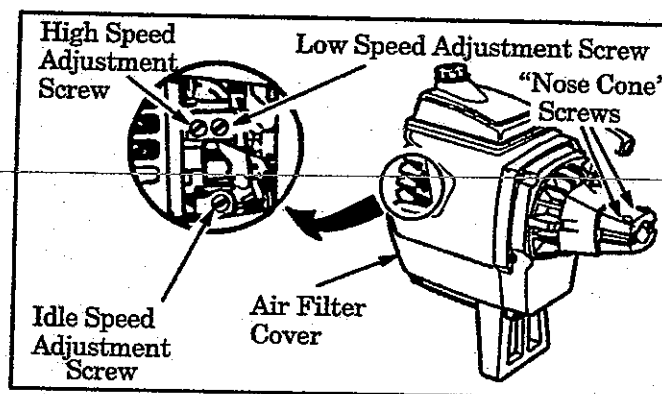


Figure 25

E. STARTER ROPE

- Replace a starter rope that breaks.

▲ DANGER

Never start the engine with the clutch shroud removed. The clutch will fly apart and cause serious injury.

▲ WARNING

Do not remove the retaining tab and screw or the pulley. The spring beneath the pulley is under tension and can fly out and cause serious injury. If any part of pulley housing assembly is damaged other than the rope, do not use unit. Take it to your Authorized Service Dealer.

1. Disconnect spark plug wire. Figure 26.
2. Remove the screw from the trigger housing. (refer to Figure 4).
3. Remove the trigger housing from the handlebar.
4. Carefully pull wire assembly out of the foam grip.
5. Loosen two "Nose Cone" screws and remove the tube from the clutch shroud. Figure 26.
6. Remove the four clutch shroud screws with the small hex wrench provided. Figure 26.
7. Separate clutch shroud from engine. Figure 26.

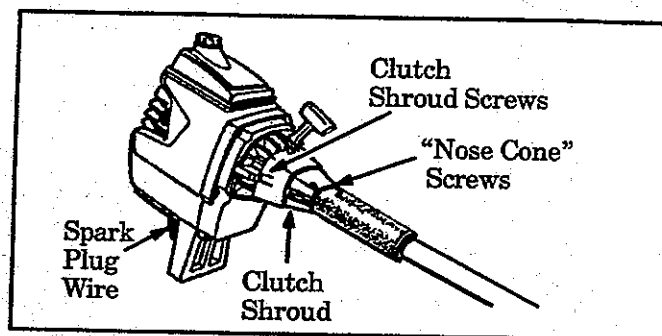


Figure 26

▲ DANGER

Use only a hand tool to remove the clutch. Do not use any type of motorized unit or strike the clutch in any way. Otherwise, the clutch will fly apart and cause serious injury.

8. Hold the "Flats" of the clutch with an adjustable wrench. Figure 27 (inset). Remove the nut counterclockwise with a wrench.

NOTE: Clutch will slide off the crankshaft intact. Do not disassemble the clutch.
9. Remove the cupped washer, clutch, and large flat washer as shown in Figure 27.
10. Remove pulley housing from engine. Figure 27.

11. Remove the rope retainer screw. Figure 28 . Remove any remaining rope from around the pulley ratchet. Figure 29 .
12. Hold pulley housing as shown in Figure 29 (inset). Hand turn pulley clockwise as far as it will go.
13. Turn pulley counterclockwise until the pulley notch is aligned with the housing notch next to the pulley tab and screw. Figure 29 .
14. Next, turn the pulley one complete turn counterclockwise until the notches are aligned again.
15. Insert the hex wrench into the hole formed by the notches to hold the pulley in position. Figure 29 (inset—upper left).
16. Use a 42" length of replacement rope.
17. Move away 10 feet (3 meters) from the fuel tank with the replacement rope. Use a match and melt both ends of the rope to prevent fraying.
18. Pull melted ends through a thick, clean rag while rope is still hot to obtain smooth, pointed ends.
19. Insert one end of the rope through the handle and secure with a knot. Leave a 3/16" pigtail behind the knot. Figure 29 (inset—upper right).
20. Insert other end of the rope through the rope exit hole into the inside of the housing, into the pulley and up through the pulley hole. Figure 29 .
21. Wrap the rope counterclockwise around the pulley ratchet and tuck loose end under the rope at the pulley hole. Figures 28 & 29 . Leave a 1 inch tail laying flat on top of the pulley *between* the retainer rib and the retainer post. Figure 29 . The rope tail *must not* extend beyond the raised circle on the pulley to prevent interference with the pulley tab. Figure 29 .
22. Thread rope retainer screw into the screw post. Figure 29 . Do not overtighten screw.
23. Hold the rope taut at the rope exit hole so the pulley will not move. Remove hex wrench. Allow rope to rewind *slowly*.
24. Make sure spacer is in place. See Figure 27 . Reverse steps 1 through 10 to re-assemble.

CAUTION: When reinstalling the clutch, tighten the nut until the cupped washer is flattened against the clutch. Over or under tightening nut can cause engine damage.

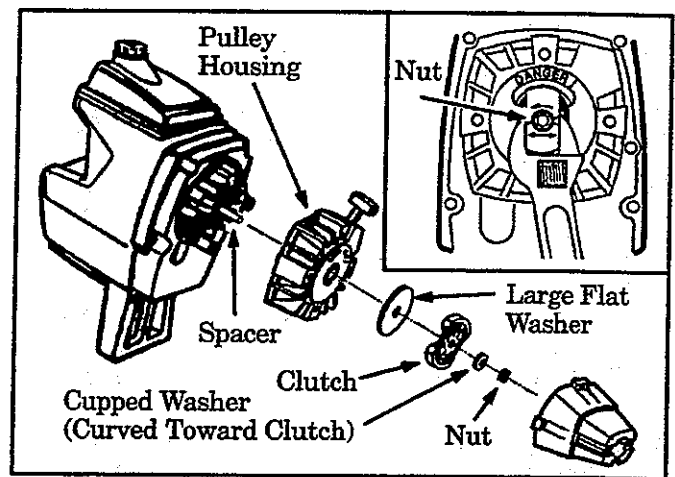


Figure 27

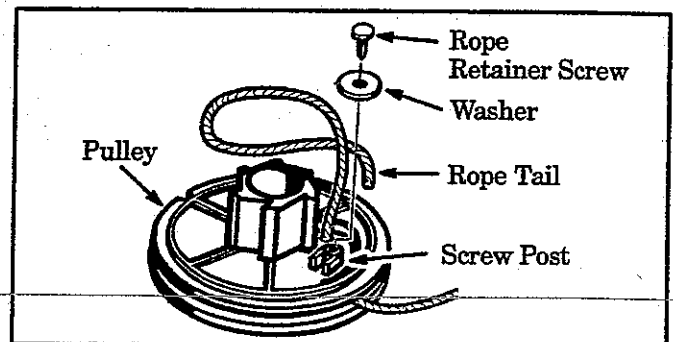


Figure 28

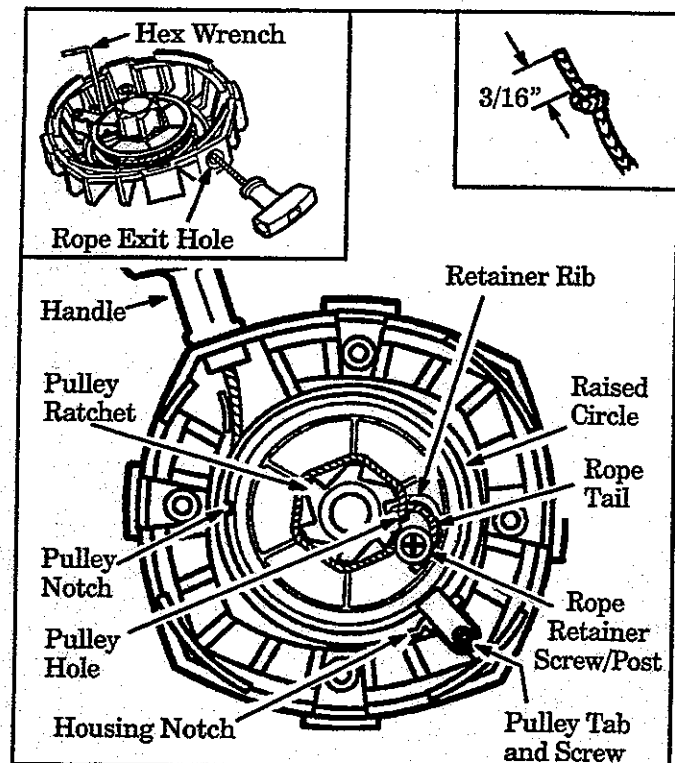


Figure 29

NOTES

F. BLADE SHARPENING

⚠ WARNING

Always stop the engine before sharpening a blade. The blade will continue to spin after the engine stops or after the throttle trigger has been released. Make sure the blade has stopped coasting and disconnect spark plug before performing work on the blade.

1. Check blades for flatness periodically. Lay the blade on a flat surface and inspect the blade for flatness before sharpening. Throw away a blade that is not flat.
2. File or grind each edge in the same manner to maintain a balanced blade. Figure 30.

⚠ WARNING

Always replace a blade that is bent, warped, cracked, or damaged in any other way. Never attempt to straighten and re-use a damaged blade. Use only the specified replacement blade.

CAUTION: Wear protective gloves when handling or performing maintenance on the blade to help avoid injury.

⚠ WARNING

To prevent the blade from cracking or flying apart after sharpening, do not file within 1/4 inch of the radii shown in Figure 30.

BRUSH BLADE

File Or Grind
Blade As Shown

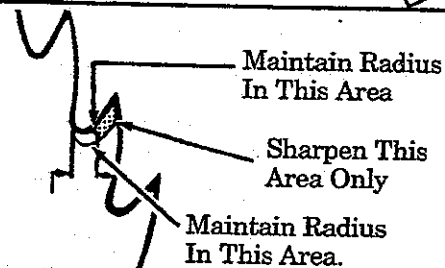
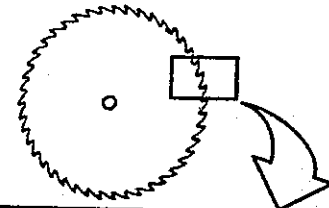


Figure 30

G. OPTIONAL 4 Point, 8" Blade

⚠ WARNING

Always stop the engine before sharpening a blade. The blade will continue to spin after the engine stops or after the throttle trigger has been released. Make sure the blade has stopped coasting and disconnect the spark plug before performing work on the blade.

1. The 4 point, 8 inch blade is reversible. When the cutting edge on one side becomes dull, turn the blade over. When both sides of cutting edges become dull, the blade may be resharpened.
2. Check blades for flatness periodically. Lay the blade on a flat surface and inspect the blade for flatness before sharpening. Throw away a blade that is not flat.
3. File or grind each edge in the same manner to maintain a balanced blade. Figure 30.

⚠ WARNING

Always replace a blade that is bent, warped, cracked, or damaged in any other way. Never attempt to straighten and re-use a damaged blade. Use only the specified replacement blade.

CAUTION: Wear protective gloves when handling or performing maintenance on the blade to help avoid injury.

⚠ WARNING

To prevent the blade from cracking or flying apart after sharpening, do not file within 1/4 inch of the radii shown in Figure 30.

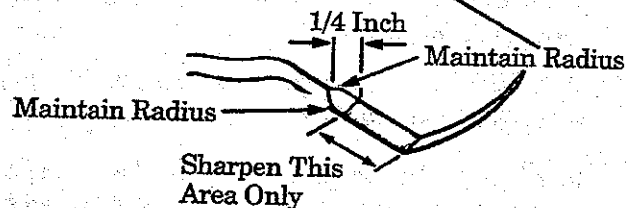
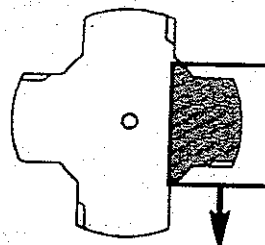


Figure 31

MAINTENANCE ACCESSORIES

FLEX SHAFT LUBE	952-701570
AIR FILTER	952-711509
SPARK PLUG	530-030077

H. TROUBLE SHOOTING CHART

SYMPTOM	CAUSE	REMEDY
Engine will not start or will run only for a few seconds after starting.	<ol style="list-style-type: none"> 1. Fuel tank empty. 2. Engine flooded. 3. Spark plug not firing. 4. Fuel not reaching carburetor. 5. Carburetor requires adjustment. 6. None of the above. 	<ol style="list-style-type: none"> 1. Fill tank with correct fuel mixture 2. See "Starting Instructions." 3. Install new plug/check ignition system. 4. Clean fuel filter; inspect fuel line. 5. See "Carburetor Adjustments." 6. Contact your Service Dealer.
Engine will not idle properly.	<ol style="list-style-type: none"> 1. Carburetor requires adjustment. 2. None of the above. 3. Throttle trigger screw too tight. 	<ol style="list-style-type: none"> 1. See "Carburetor Adjustments." 2. Contact your Authorized Service Dealer. 3. See the "Throttle Cable" section.
Engine will not accelerate, lacks power, or dies under a load.	<ol style="list-style-type: none"> 1. Air filter dirty. 2. Spark plug fouled. 3. Carburetor requires adjustment. 4. Muffler outlets plugged. 5. None of the above. 	<ol style="list-style-type: none"> 1. Clean or replace air filter. 2. Clean or replace spark plug and re-gap. 3. See "Carburetor Adjustments." 4. Contact your Authorized Service Dealer. 5. Contact your Authorized Service Dealer.
Engine smokes excessively.	<ol style="list-style-type: none"> 1. Air filter dirty. 2. Fuel mixture incorrect. 3. Carburetor requires adjustment. 	<ol style="list-style-type: none"> 1. Clean or replace air filter. 2. Refuel with correct fuel mixture. 3. See "Carburetor Adjustments."
Engine runs hot.	<ol style="list-style-type: none"> 1. Fuel mixture incorrect. 2. Carburetor requires adjustment. 3. Spark plug incorrect. 4. None of the above. 	<ol style="list-style-type: none"> 1. See "Fueling Your Unit." 2. See "Carburetor Adjustments." 3. Replace with correct plug. 4. Contact your Authorized Service Dealer.
Cutting attachment turns at idle speed.	<ol style="list-style-type: none"> 1. Carburetor requires adjustment. 2. Throttle cable binding. 3. Clutch requires repair. 	<ol style="list-style-type: none"> 1. See "Carburetor Adjustments." 2. Contact your Authorized Service Dealer. 3. Contact your Authorized Service Dealer.
Cutting attachment stops under a load or does not turn when engine is accelerated.	<ol style="list-style-type: none"> 1. Drive Shaft not engaged. 2. Drive shaft broken. 3. Carburetor requires adjustments. 4. Clutch requires repair. 	<ol style="list-style-type: none"> 1. See "Assembly, "Tube." 2. Contact your Authorized Service Dealer. 3. See "Carburetor Adjustments." 4. Contact your Authorized Service Dealer.
Line does not advance or breaks while cutting.	<ol style="list-style-type: none"> 1. Line improperly routed in head. 2. Line improperly wound onto spool. 3. Line size incorrect. 4. Too little line outside head. 5. Dirt accumulated on cover cut-outs. 	<ol style="list-style-type: none"> 1. Remove cover. Check line routing. 2. Rewind line tightly and evenly. 3. Use only POULAN PRO .080" line. 4. Remove cover. Pull 4" of line to outside. 5. Clean cover cut-outs.
Line welds on spool.	<ol style="list-style-type: none"> 1. Line size incorrect. 2. Incorrect spool. 3. Crowding line against material being cut. 4. Cutting at higher speed than necessary. 	<ol style="list-style-type: none"> 1. Use only POULAN PRO .080" line. 2. Use proper spool. 3. Cut with tip of line. 4. Reduce cutting speed.
Line releases continuously.	<ol style="list-style-type: none"> 1. Line improperly routed in head. 	<ol style="list-style-type: none"> 1. Remove cover. Check line routing.
Line usage is excessive.	<ol style="list-style-type: none"> 1. Line improperly routed in head. 2. Line size incorrect. 3. Cutting at high speed around hard objects. 4. Crowding line against material being cut. 	<ol style="list-style-type: none"> 1. Remove cover. Check line routing. 2. Use only POULAN PRO .080" line. 3. Reduce speed around hard objects. 4. Cut with tip of line.
Line pulls back into head.	<ol style="list-style-type: none"> 1. Too little line outside of head. 2. Line size incorrect. 	<ol style="list-style-type: none"> 1. Remove cover. Pull 4" of line to outside. 2. Use only POULAN PRO .080" line.

PARTS AND SERVICE

Your POULAN PRO product has been expertly engineered and carefully manufactured to rigid quality standards. As with all mechanical products, making adjustments or replacing parts may be necessary during the life of your unit.

FOR SERVICE OR REPLACEMENT PARTS:

1. Consult your dealer/place of purchase.
2. Consult the yellow pages of your phone directory for the name of the nearest Poulan/Weed Eater Master Service Dealer (under "saws" for Chain Saws or under "lawnmowers" for Trimmers, Brushcutters, and Blowers).
3. For replacement parts, have available the following information:
 - a. Description of the tool.
 - b. Model Number.
 - c. Description of part.

NOTE: Poulan/Weed Eater Division provides parts and service through its authorized distributors and dealers; therefore, all requests for parts and service should be directed to your local dealer(s). The philosophy of Poulan/Weed Eater Division is to continually improve all of its products. If the operating characteristics or the appearance of your product differs from those described in this Operator's Manual, please contact your local Poulan/Weed Eater Dealer for updated information and assistance. Parts and repair service are not available directly from Poulan/Weed Eater Division WCI Outdoor Products, Inc.

POULAN/WEED EATER
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530-082111-2-01/20/94

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